



# Swiss Bank Corporate Headquarters

*Stamford, Connecticut*

**T**he new Swiss Bank Headquarters Complex, located in Stamford, CT, has been designed to accommodate the relocation and centralization of the majority of bank's office and trading operations from three buildings in New York City. The Phase I project, constructed on a 12-acre site,

consists of a 15-story tower adjoining an 8-story parking, technology and trading facility.

A unique feature of the project is the trading arena sitting atop a seven-story base, which, at 144' long and 240' wide, is the world's largest clear-span trading area. The roof framing consists of exposed king-post trusses constructed of a curved box gird-



er with two underslung cables held apart by a central post. The cables, requiring exact construction tolerances, were prestressed without the use of turnbacks or other mechanical hardware. A small section of the final post was slid over a narrower guide post, the cables were set in their groves and, like an arrow being drawn, the post with cables was pulled down the narrow guide post until the required stress was obtained. Half pipes, field cut to exact lengths, were then welded in place over the narrow post to complete the final post section. At the north end of the girder span, the king-post-trusses are supported on a 30' high clerestory truss, which provides the space with indirect natural daylight. The ceiling configuration of the trading room curves from 35' high at the south end to 50' high at the north end.

Other major features of the

## Jurors' Comments

*"Very creative in meeting the owner's requirements for a large clear-span area"*

*"Bottom chord cable trusses with mechanical fastening devices simplified construction."*

*"Very efficient structural solution related to the lateral loads at trusses."*

project include the seismic separation of the 8-story parking/trading facility from the 15-story office structure (which

required the design of unique details for the post tensioned portions of the structure); and the design of the large, structurally reinforced window wall of the grand entrance lobby together with its suspended staircase and mezzanines.

The six-story-high, 250'-long window wall of the main entrance lobby required special design consideration. Unbraced circular composite concrete and steel columns, rising the six stories, support cantilevered steel outriggers, which support a horizontal, and vertical tube system that carries the glass sections. In addition, the lobby contains a five-story staircase connecting four stories of mezzanines. Both the staircase and mezzanines are suspended by hanger rods and cables from the sixth floor framing.

Through use of different structural systems and materials, the client's diverse space needs were accommodated and integrated within a unified complex. Unlike working with a developer on a speculative office building, working hand in hand with the bank's internal corporate real estate, information technology, and construction management teams allowed the design team to create a complex uniquely tailored to the specific needs of the bank.

The office tower accommodates 40' and 60' core-to-wall lease-spans and 9' floor-to-ceiling heights with a 6" raised floor throughout. Accommodating this floor to ceiling height, while minimizing the building height and matching the parking floor levels, required increased coordination efforts by the design team. In addition to normal office functions, the tower also provides space for technology and cafeteria functions as well as the Center for Learning and Development located on the top two floors of the tower. The Center for Learning and Development provides space for employee training and development in the auditorium and conference facilities.





The parking facility, which is located beneath the technology and trading centers, is a post-tensioned concrete structure. Combining post-tensioning with high quality concrete, appropriate admixtures, and rigorous concrete quality control has provided the owner with a durable maintenance-free parking garage with only a slight increase in construction cost.

The technology center located at the fifth floor of the parking and trading building, houses the entire complex's state of the art information and communications systems. All of the utilities required for business operation have multiple degrees of redundancy of M.E.P. and communication distribution systems.

The Phase I project provides 594,000-sq.-ft. of rentable space and 377,000-sq.-ft. of enclosed parking. Two future phases of the project include two additional office towers and the expansion of the parking and trading facility by 50%. Full build-out of the development will contain up to 1.7 million-sq.-ft. of office space plus 1.2-million-sq.-ft. of enclosed parking. The design team considered the impact of future phases in the design and construction of Phase I.

While the budgeted cost for the structural portion of the project was \$19,993,000, the actual cost of construction of the structure is \$24, 997,000. The variation in cost is due to the addition of 21,000-sq. ft. to the trading facility and a redesign of the office tower to accommodate owner requirements.

## Project Team

Owner:

Swiss Bank Corporation,  
Stamford, CT

Structural Engineer:

Thornton-Tomasetti  
Engineers, New York City

Architect:

Skidmore, Owings & Merrill,  
New York City

General Contractor:

Turner Construction Co.,  
New York City

Steel Fabricator:

Cives Steel Co., Gouverneur,  
NY